

U.S. Patent Application Serial No. 09/673,194
Amendment filed September 6, 2005
Reply to OA dated July 14, 2004

REMARKS

Claims 1-3, 9-12 are pending in this application. Claims 1 and 10 are amended.

The support for the amendments to claims 1 and 10 is found on p.15, line 15. The applicants respectfully submit that no new matter has been added.

The Applicants appreciate the indication that Claim 12 would be allowable if rewritten in independent form as there is no disclosure or suggestion in the closest prior art.

Claims 1-3 and 9-11 are rejected under 35 USC 103(a) as being unpatentable over JP 09104834 (JP'834). (Office Action p.3)

The Office Action stated that one deficiency of JP'834 is pH, because the reference discloses that the dispersion obtained after completion of crosslinking has pH of 8.5 to 9.5.

The Office Action cites two cases *In re Woodruff*, 919 F.2d 1575; 16 U.S.P.Q.2D 1934 (Fed. Cir. 1990) and *Titanium Metals Corp., v. Banner*, 778 F.2d 775; 227 U.S.P.Q. 773 (Fed. Cir. 1985) asserting that these cases support the proposition that where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable."

However, that the facts of both cases are significantly different that they cannot apply to a pH range difference between an acidic to neutral range of 6.0-8.0 and a neutral to basic range of 8.5-9.5.

For example, in *In re Woodruff* the Federal Circuit decided that CO concentration of "more than 5%" was obvious in light of a patent disclosing a carbon monoxide concentration of "about

U.S. Patent Application Serial No. 09/673,194
Amendment filed September 6, 2005
Reply to OA dated July 14, 2004

1-5%" because the expression "about 1-5%" does allow for concentrations slightly above 5%.

In *Titanium Metals Corp., v. Banner*, the Federal Circuit stated at p.783 the following:

as admitted by appellee's affidavit evidence from James A. Hall, the Russian article discloses two alloys having compositions very close to that of claim 3, which is 0.3% Mo and 0.8% Ni, balance titanium. The two alloys in the prior art have 0.25% Mo -- 0.75% Ni and 0.31% Mo -- 0.94% Ni, respectively. The proportions are so close that prima facie one skilled in the art would have expected them to have the same properties.

These two cases are very different from a *0.7 difference on a pH scale which is an exponential scale*.

The two cases cited in the Office Action do not apply to the facts of this case and are therefore logically inappropriate. In fact, the present specification clearly states on p.15, lines 7-15:

As to the dispersion, pH at finishing cross-linking reaction is adjusted within the range from 6.0 to 8.0. The reasons for adjusting pH at finishing cross-linking reaction are as follows: **When pH is more than 8.0, cross-linking reaction of the thermoplastic resin cannot sufficiently proceed and a water-based pigment dispersion showing excellent properties such as water resistance, alkali resistance and solvent resistance cannot be obtained.** When pH is less than 6.0, dissolved thermoplastic resin precipitates. It is preferable that pH of the dispersion is at most 7.8 and at least 6.3. (Emphasis added)

Based on this disclosure which explains that pH higher than 8.0 is unworkable and outside the claimed invention, the conclusion of obviousness is not logically possible. Not only is there more than a 0.5 difference in pH ranges, but the Applicants have clearly explained that anything higher than 8.0 the **cross-linking reaction of the thermoplastic resin cannot sufficiently proceed.**

U.S. Patent Application Serial No. 09/673,194
Amendment filed September 6, 2005
Reply to OA dated July 14, 2004

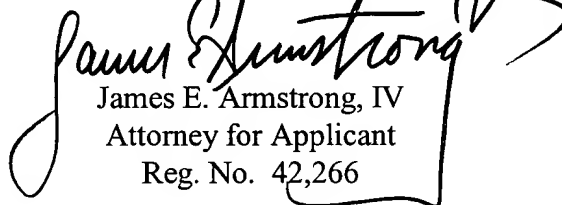
The Applicants would appreciate the reconsideration of the rejection. In view of the aforementioned amendments and accompanying remarks, the claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,
HANSON & BROOKS, LLP


James E. Armstrong, IV
Attorney for Applicant
Reg. No. 42,266

JAM/jam
Atty. Docket No. 001350
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Q:\FLOATERS\JAMIE\00\001350\001350amd9-6